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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,381	09/21/2005	David Aitken	PN/4-33001A	3366

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CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER	
ZAREK, PAUL E	

ART UNIT	PAPER NUMBER
1628	

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01/05/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/550,381	AITKEN ET AL.	
	Examiner	Art Unit	
	Paul Zarek	1628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 December 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,6,7,9,10 and 13* is/are pending in the application.

4a) Of the above claim(s) *9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6,7,10 and 13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/17/2009, 10/19/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/19/2009 has been entered.

Status of the Claims

2. Claims 6 and 7 have been amended by the Applicant in correspondence filed on 10/19/2009. Claims 1, 2, 6, 7, 9, 10, and 13 are currently pending. Claim 9 remains withdrawn as being drawn to a nonelected invention. Claims 1, 2, 6, 7, 10, and 13 are examined herein. This is the first Office Action on the merits of the claim(s) following a request for continued examination.

RESPONSE TO ARGUMENTS

3. Examiner acknowledges receipt of IDS filed on 10/19/2009, containing Zamnowski, et al., and Borowicz, et al., and that Beers and Berkow has already been received by the office. Examiner further acknowledges that although no English translation is available for Mutschler, et al., the inclusion of this document on the international search report submitted on 09/21/2005

satisfies Applicants' burden. See MPEP § 609.04(a)(III). Examiner has considered the contents therein and has indicated as much in initialed 1449 forms.

4. Claims 6 and 7 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite because they lacked sufficient antecedent basis due to dependency on a cancelled claim. This rejection is moot in light of Applicants' amendment to Claims 6 and 7.

5. Claims 1, 2, 6, and 7 were rejected under 35 U.S.C. 103(a) as being unpatentable over Czuczwar, et al. (European Journal of Pharmacology, 1998), in view of Deckers (CNS Drugs, 2002), and Suter, et al. (Mutation Research, 2002). Applicants traversed these rejections on the grounds that the combinations of Czuczwar, et al., Deckers, and Suter, et al., or Levy, et al., Deckers, and Suter, et al., do not teach or fairly suggest the claimed invention. Specifically, Applicants assert that the combination of carbamazepine and AMP397 provides unexpected synergism for the protection of seizures. Applicants note that when administered alone, both carbamazepine and AMP397 do not protect mice from seizures, whereas the combination protects 40% of animals from seizures. Applicants further contend that Czuczwar, et al., do not suggest synergism between carbamazepine and AMP397. Applicants also state that Czuczwar, et al., only show that LY300164, an AMPA receptor antagonist, reduces the ED_{50} of carbamazepine but does not demonstrate that the combination protects more subjects than either administered alone, and that Examiner has not provided evidence establishing a connection between reducing the ED_{50} of carbamazepine and an increase in the number of patients effectively treated. Finally, Applicants submit that LY300164 is a completely different and non-obvious compound relative to AMP397. Respectfully, Examiner does not find Applicants' arguments persuasive.

6. Czuczwar, et al., generally teach that AMPA/kainate receptor antagonists "may potentiate the anticonvulsive activity of anticonvulsive drugs" (pg 107, col 1, para 3, lines 1-3) and explicitly disclose that LY300164 "enhanced the protective action of carbamazepine" (pg 107, col 2, para 2, lines 1-3). Thus, it would have been *prima facie* obvious to combine an AMPA receptor antagonist with a known anticonvulsant, such as carbamazepine, for example to treat seizures. The question then becomes whether AMP397 was a known AMPA receptor antagonist. Suter, et al., teach that the elected species, AMP397, is a known AMPA receptor antagonist, and a potent anti-convulsant (abstract). "It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (MPEP § 2144.06(I). Deckers provides motivation to utilize AMP397 due to the fact that AMP397 exerts its anticonvulsive effect by a different mechanism than carbamazepine (pg 162, section 4.3). The fact that LY30064 and AMP397 are structurally distinct is not relevant to this rejection since they are both known to be AMPA receptor antagonists and anticonvulsants.

7. Since it was *prima facie* obvious to combine carbamazepine with AMP397, the subject of patentability then becomes whether the results of Applicants' combination are truly unexpected in light of the prior art. Table 1 of the instant application demonstrates that administration of either 7.5 mg/kg carbamazepine or Compound **1** (AMP397), alone, does not protect mice from seizures. The combination of carbamazepine and Compound **1** protected 40% of the mice from seizures. Likewise, Czuczwar, et al., demonstrates that 2 mg/kg LY300164 alone offers no

protection from seizures (Fig 1). However, the presence of 2 mg/kg LY300164 significantly lowered the ED_{50} of carbamazepine (Table 1). Applicants' argument of unexpected results is not persuasive. Both the instant application and the prior art demonstrate that administration of an AMPA receptor antagonist alone is not sufficient to inhibit seizures, yet this ineffective dose of an AMPA receptor antagonist is sufficient to render a minimally effective dose of a known anticonvulsant (carbamazepine) significantly more effective. Thus, the results disclosed in Table 1 of the instant application would not be considered surprising or unexpected in light of the results disclosed in Table 1 of Czuczwar, et al. Therefore the rejection of Claims 1, 2, 6, and 7 under 35 U.S.C. 103(a) as being unpatentable over Czuczwar, et al., in view of Deckers and Suter, et al., is maintained.

8. Claims 1, 2, 6, 7, and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Levy, et al. (US Patent No. 5,095,033, 1992) in view of Deckers (above) and Suter, et al., (above). Applicants have not discussed the merits of the standing rejection of Claims 1, 2, 6, 7, and 10 as being unpatentable over Levy, et al., Deckers, and Suter, et al. Therefore, this rejection is maintained.

9. Claim 13 was rejected under 35 U.S.C. 103(a) as being unpatentable over Czuczwar, et al., and Deckers and Suter, et al., as applied to claims 1, 2, 6, and 7 above, and further in view of Weaver, et al. (US Patent No. 6,306,909, 2001). Applicant traversed this rejection on the grounds that Czuczwar, et al., Deckers, and Suter, et al., did not fairly teach or suggest combining carbamazepine and AMP397. Applicants have not disagreed with Weaver, et al., in the manner in which it was applied to Claim 13 (namely, with respect to putting anti-epileptic medicaments in a kit). Examiner does not find Applicants' arguments persuasive for the reasons

set forth above. Therefore, the rejection of Claim 13 under 35 U.S.C. 103(a) as being unpatentable over Czuczwar, et al., Deckers, and Suter, et al., further in view of Weaver, et al., is maintained.

Conclusion

10. Claims 1, 2, 6, 7, 10, and 13 remain rejected.

11. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Zarek whose telephone number is (571) 270-5754. The examiner can normally be reached on Monday-Thursday, 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brandon Fetterolf can be reached on (571) 272-2919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PEZ

/San-ming Hui/
Primary Examiner, Art Unit 1628